

## **ADDENDUM No. FOUR**

Project Name: Lemur Lookout Exhibit  
Brandywine Zoo

Project No.: WBZ-7

Contract No.: 2019-WBZ-100

Date of Issue: Friday, October 11, 2019

Notice No. 1: Attach this addendum to the Project Manual for this project. It modifies and becomes part of the Bidding Documents. Work or material not specifically mentioned herein is to be as described in the main body of the specification and as shown on the drawings.

Bids Due: Tuesday, October 15, 2019 at 1:00 PM  
Auditorium  
DNREC, Division of Parks and Recreation  
89 Kings Highway, Dover DE 19901

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### Addendum Three:

- 1 Refer to Addendum Two, Item 1: The incorrect Davis Bacon Wage rates were issued. The correct rates are included with this Addendum.

### Project Manual:

- 1 Refer to Section 00 41 13, Bid Form: The Bid Form has been revised to indicate the dewatering allowance and quantities to Unit Prices 12 and 13.
- 2 Refer to Section 01 23 00 Alternates: This section has been revised and is included with this Addendum.

### Drawings:

- 1 Delete Sheet ST202. Add Reissued Sheet ST202.
- 2 Delete Sheet A1.1. Add Reissued Sheet A1.1.
- 3 Refer to Structural Drawings: The locations calling for 1-5/8" or 1-7/8" cables may be changed to 1-1/2" cables

### Questions and Responses:

- 1 Question: Please confirm the contract number cover sheet of the project manual references WBZ-7 while the plans call for 20-19-WBZ-100  
Response: The Project Number is a different reference than the Contract Number.
- 2 Question: Please confirm Asphalt Paving shown on sheet ST 202 is to be heavy duty paving  
Response: Due to the slope, curves, and size of trucks for deliveries, the entrance drive should be heavy duty.
- 3 Question: Please clarify if the project is intended to be bid as an "Unclassified" soils project or shall it be bid using the rock removal unit price if rock is encountered during excavation operations.

Response: The project should be bid as classified soil and the unit price will be used to address any rock that is discovered once the volume has been established.

- 4 Question: Since it is not possible to determine the quantity/source of groundwater that may be encountered during the course of the work, can an allowance be established for all bidders to include in their proposal to handle dewatering due to groundwater as specified in section 312319

Response: An allowance for dewatering due to groundwater has been set at \$25,000

- 5 Question: Please clarify the acceptable methods for rock removal.

Response: (See Geotech Report). The animals will be sensitive to noise and vibration, so drilling and splitting with hydraulic rock splitters or drilling and using expansive splitting agents should be considered. Hammering with a hydraulic breaker and blasting probably should be avoided.

- 6 Question: Would any consideration be given to extending the bid date?

Response: The date has been revised to Tuesday, October 15, 2019 at 1:00 PM.

- 7 Question: 1-5/8" and 1-7/8" cable is primarily used in marine rigging and mining applications and has limited availability for finishes and hardware. This gage appears to be too large for the required project and is substantially more expensive than a smaller gage. Is a smaller cable size acceptable at the locations calling for 1-5/8" or 1-7/8"? If so, please define.

Response: The locations calling for 1-5/8" or 1-7/8" cables may be changed to 1-1/2" cables.

- 8 Question: In Addendum 2, RFI response #17 states that the cable and hardware should be supplied per detail 6/ST701. This detail establishes that the desired finish for the support cable and hardware is Galvanized. 1-5/8" and 1-7/8" cable is not available in a galvanized finish. It is only available in BRT with a lube. Please verify if this is acceptable.

Response: Hardware should be as indicated on the structural drawings. Due to size of wire rope, cost, and schedule this project does not require swage socket hardware as indicated on detail 6/ST701. See also attached images. Use appropriate size galv. turnbuckle, wire rope clips, and thimbles. Change 1/2" tie rod on masts and curb from galvanized to S.S. Rod should not be painted.

- 9 Question: Field assemblies are only available for closed swaged socket fittings up to 1-1/8" with an eye end, and 1-1/2" with a jaw and pin assembly. For cable sizes above 1-1/2", machine swaged fittings will be required. Please confirm if the schedule will allow for the 5-6 weeks prior to mobilization that is required once steel is in place to take field verified dimensions and fabricate these assemblies.

Response: Hardware should be as indicated on the structural drawings. Due to size of wire rope, cost, and schedule this project does not require swage socket hardware as indicated on detail 6/ST701. See also attached images. Use appropriate size galv. turnbuckle, wire rope clips, and thimbles. Change 1/2" tie rod on masts and curb from galvanized to S.S. Rod should not be painted.

- 10 Question: Should wire rope clip assemblies be acceptable, drop forged wire rope clips are not available in 1-7/8" size.

Response: Understood.

- 11 Question: Would bidding 1-7/8" assemblies as 2" cable be acceptable to the engineer of record?

Response: The engineer finds bidding larger cables than specified to be acceptable.

- 12 Question: In Addendum 2, RFI response #17 states that the cable and hardware should be supplied per detail 6/ST701. This detail establishes that the desired hardware style is galvanized with a closed swaged socket. There is a wire rope clip and thimble schedule on S5.11 that specifically calls out the number of wire rope clips and turnback for the cable assemblies. Please note, Wire Rope Clip and Thimble assemblies

are significantly more cost effective. Is there any potential for bidding with wire rope clips in lieu of swaged socket fittings?

Response: Hardware should be as indicated on the structural drawings. Due to size of wire rope, cost, and schedule this project does not require swage socket hardware as indicated on detail 6/ST701. See also below image. Use appropriate size galv. turnbuckle, wire rope clips, and thimbles. Change ½" tie rod on masts and curb from galvanized to S.S. Rod should not be painted.



- 13 Question: Can you provide more information on the feeding log shown on dwgs A1.2, A3.1 & CG 1.2? Is this going to be reclaimed wood from the sitework or something manufactured? What type, method & quantity are to be used for the support brackets and where in the exterior wall does the feeding tube need to penetrate?

Response: Feeding log will be approximately 14' long below the main viewing window. A tree indicated for removal can be used to create the log. Contractor is responsible for cutting the log to create the ½ round log as shown in detail 5/CG1.2. Three support brackets are required to support the ½ round. See building North Elevation on sheet 3.1. Support brackets to be custom fabricated out of 1/8" thick galvanized steel. Brackets to be 6" wide. Plate under log to be 8" long and plate on the building to be 10" long. Feeding tube is located on the right side of the building. See North Elevation on sheet A3.1.

- 14 Question: The drawings do not provide a temporary barricade plan or temporary directional signage to be placed during construction. Please clarify barricade/signage type and location if this is to be provided by the GC.

Response: The temporary barricade will need to be coordinated with the owner to accommodate the work to the USDA fence as well as maintain other zoo operations. A USDA fence similar to Detail 8, Sheet ST703 shall be provided to separate the construction zone from the occupied Zoo. Fence posts can set 3-feet in grade in lieu of concrete. Fence location will need to be adjusted as necessary to accommodate construction phases.

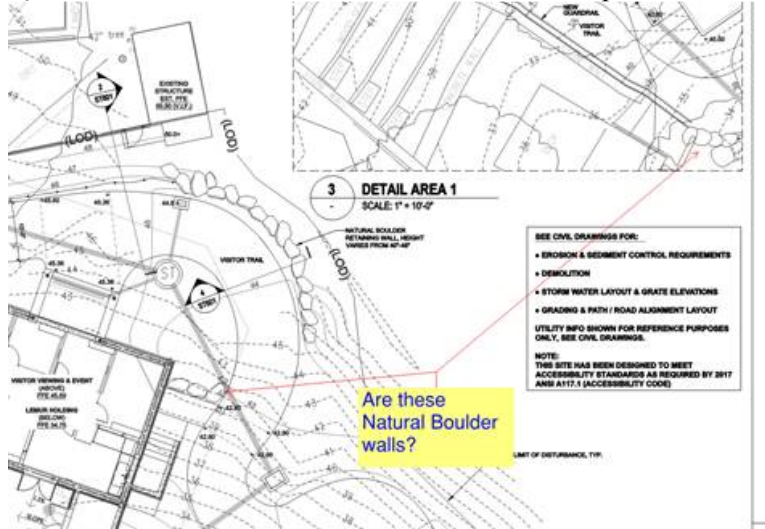
- 15 Question: Room 100 is not listed on the finish schedule. Is this area to receive epoxy flooring?

Response: Room 100 should be treated the same as 101 through 106 with regards to the finish schedule. Sheet A1.1 will be revised and reissued.

- 16 Question: Project requirement #1 on AS.1 states to build new retaining wall near amphitheater and to refer to L and S drawings. The walls are not shown on Structurals or Landscaping.

Response: Refer to Detail Area 1 (amphitheater/path/restroom building area) in ST200 series and Detail 4/ST703 on Landscape Drawings for guardrail connection details. Refer to S1.3 for Path Foundation Plan and Detail 5/S5.2 for turn down slab details.

- 17 Question: Are the below items noted below in snapshot from ST201 natural boulder walls?



Response: Correct, the two areas pointed to are natural boulder walls.

- 18 Question: One of our venders is having trouble sourcing the Eucalyptus Ntengus in the specified sizes for the Boma Fence and Kickrail. Do you have experience with a supplier or subcontractor that can supply this material?

Response: The supplier may include but is not limited to the following: Safari Thatch 954.564.0059 [www.safarithatch.com](http://www.safarithatch.com) . BYXS, 877.625.9001, <https://www.byxscommercial.com/product/eucalyptus-poles-beams/>

- 19 Question: Please clarify that the concrete paving shown on sheet S 1.3 is to be asphalt in the base bid per sheet ST 202 and concrete in Alternate 2. If so please issue details on treatment of the paved edge intersection with the existing stone retaining wall for the base bid asphalt condition.

Response: Concrete paving shown on S1.3 shall be base bid; drawing sheet ST202 will be revised and reissued to show the extent. All other paving shall be asphalt base bid. Alternate 2 shall be to provide concrete paving for the entire project extent.

- 20 Question: The drawings call for a helical anchor to be used to tie back the cable/net structure for the Lemur enclosure. The tie backs are to withstand a 10K tension load according to the plans. Could you provide the length, helices diameter, shaft size etc. for bidding purposes. Also please specify if any test pile(s) is to be completed. We can't locate any specifications for the helical anchors, please direct us to or provide specifications.

Response: Delete the reference to alternate foundation indicating helical piles.

- 21 Question: Q&A #13 and #22 of addendum 2 request that a specification be provided for the stainless steel casework. This was not addressed, please provide.

Response: Refer to Addendum 2, reissued Sheet A1.1. The reference to the shelving was changed to 10 51 23.

- 22 Question: Please update the bid form, as it reflects a due date of October 10th.

Response: A revised Bid Form is included with the Addendum.

- 23 Question: On the west elevation, the fir 3 x 6 Lock Deck roof deck boards will be in contact with the concrete wall as will the rafter tails. No provisions are indicated as to procedure or product to protect this wood product from decay resulting in this contact.

Response: Provide sill sealer at all locations where untreated wood products will be in contact with concrete.

Attachments  
End Addendum Four